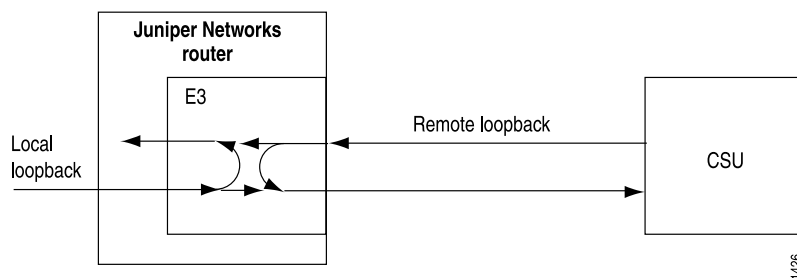


Configuring E3 Loopback Capability

You can configure loopback capability between the local E3 interface and the remote CSU. You can configure the loopback to be local or remote. With local loopback, the E3 interface can transmit packets to the CSU, but receives its own transmission back again and ignores data from the CSU. With remote loopback, packets sent from the CSU are received by the E3 interface, forwarded if there is a valid route, and immediately retransmitted to the CSU (see Figure 1).

Figure 1: Remote and Local E3 Loopback



To configure loopback capability on an E3 interface, include the **loopback** statement at the [edit interfaces *interface-name* e3-options] hierarchy level:

```
[edit interfaces interface-name e3-options]  
[Unresolved xref] (local | remote);
```

Packets can be looped on either the local routing platform or the remote CSU.

To exchange BERT patterns between a local routing platform and a remote routing platform, include the **loopback remote** statement in the interface configuration at the remote end of the link. From the local routing platform, you issue the **test interface** command.

For more information about configuring BERT, see Interface Diagnostics. For more information about using operational mode commands to test interfaces, see the *JUNOS System Basics and Services Command Reference*.

To turn off the loopback capability, remove the **loopback** statement from the configuration:

```
[edit]  
user@host# delete interfaces e3-fpc/plc/port e3-options loopback
```

You can determine whether there is an internal problem or an external problem by checking the error counters in the output of the **show interface *interface-name* extensive** command:

```
user@host> show interfaces interface-name extensive
```

Example: Configuring E3 Loopback Capability

To determine whether a problem is internal or external, loop packets on both the local and the remote routing platform. To do this, include the `no-keepalives` and `encapsulation cisco-hdlc` statements at the `[edit interfaces interface-name]` hierarchy level and the `loopback local` statement at the `[edit interfaces interface-name e3-options]` hierarchy level. With this configuration, the link stays up, so you can loop ping packets to a remote routing platform. The `loopback local` statement causes the interface to loop within the PIC just before the data reaches the transceiver.

```
[edit interfaces]
e3-1/0/0 {
  no-keepalives;
  encapsulation cisco-hdlc;
  e3-options {
    loopback local;
  }
  unit 0 {
    family inet {
      address 10.100.100.1/24;
    }
  }
}
```